# THREE NEW SPECIES OF *APOGONALIA* FROM THE DOMINICAN REPUBLIC (HOMOPTERA, CICADELLIDAE, CICADELLINAE)<sup>1</sup>

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ABSTRACT: Three new species of *Apogonalia* from the Dominican Republic are described, *A. angusta, A. noda,* and *A. loxa.* 

KEY WORDS: Apogonalia, new species, Homoptera, Cicadellidae, Cicadellinae, Dominican Republic

The species of *Apogonalia* that occur on Hispaniola were reviewed by Young (1977). At that time four species were known, *A. histro* (Fabricius), *A. interrup-ta* (Signoret), *A. pinguis* Young and *A. robusta* (Walker). Three new species have now been found and are described here, two are related to *A. pinguis* and the other is not closely related to any of the four known species.

### Apogonalia angusta NEW SPECIES (Figures 1-5)

**Description:** Length of males 7.5 mm, females unknown. Similar to *A. pinguis* in general appearance, except slightly smaller, and more slender. General color pattern similar to *pinguis*, except with a dark brown spot, bordered by yellow, along middle of costa and a smaller greenish spot at base of costa. Male genitalia: Plates (Fig. 1) shorter then pygofer. Pygofer longer than wide, with slightly enlarged rounded apex. Paraphysis (Figs. 2 and 3) with two processes which are long, diverging, slightly enlarged near pointed apex. Aedeagus (Figs. 4 and 5) triangular in ventral view, with bifurcate, ventrally projecting, sharply pointed apex.

**Type Data:** Holotype male, Dominican Republic: Azua, East side of crest, Sierra Martín Carcía, 7 km WNW Barrero, 18° 21' N, 70° 58' W, 860 m, July 25-26, 1992, C. Young, R. Davidson, S. Thompson and J. Rawlins, cloud forest adjacent to disturbed forest. Paratype male, same data as holotype. Holotype and paratype have been deposited in the Carnegie Museum (Pittsburgh, Pennsylvania, U.S.A.).

**Notes:** This species is closely related to *pinguis* and can be separated from it by being smaller, less robust, and with a distinctly different aedeagus.

## Apogonalia loxa NEW SPECIES (Figures 6-10)

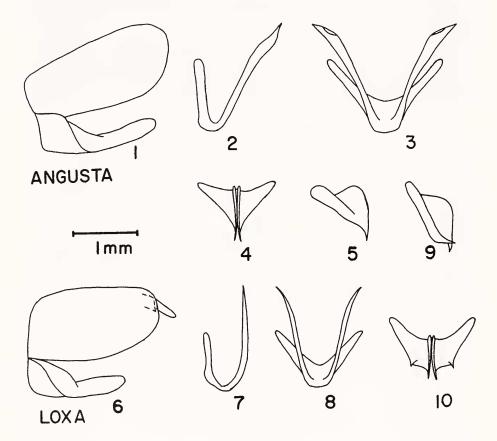
**Description:** Length of males 7.5-8.2 mm, females 7.5-8.5 mm. Similar to *A. pinguis* in size and coloration of head and thorax, differing on front wing coloration and male genitalia. General coloration similar to *pinguis* for head and pronotum. Front wings dark brown with three yellowish spots,

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one spot in basal third of wing, one larger spot from end of clavus to the costal margin, and one across apical ends of subapical cells. Male genitalia: Plates (Fig. 6) slightly over half length of pygofer. Pygofer longer than wide, evenly rounded. Paraphysis (Figs. 7 and 8) with two thin, long, slightly diverging processes. Aedeagus similar to *pinguis* except lateral spines extending ventrally.

**Type Data:** Holotype male, Dominican Republic: Pedernales, 20 km. N Cabo Rojo, 18° 07' N, 71° 39' W, 1070 m, July 23-24, 1990, C. Young, J. E. Rawlins, S. Thompson. Paratypes: two males and three females, same data as holotype. Holotype and one female paratype have been deposited in the Carnegie Museum, one male and one female paratype in the University of Kentucky Collection (Lexington, Kentucky, U.S.A.), one male paratype in the Florida Collection of Arthropods (Gaines-ville, Florida, U.S.A.), and one female paratype in the National Collection, Santo Domingo, Dominican Republic.



Figures 1-5 *Apogonalia angusta* n. sp. Fig. 1, male genital capsule, lateral view. Fig. 2, paraphysis, lateral view. Fig. 3, paraphysis, ventral view. Fig. 4, aedeagus, ventral view. Fig. 5, aedeagus, lateral view. Figures 6-10, *Apogonalia loxa* n. sp. Fig. 6, male genital capsule, lateral view. Fig. 7, paraphysis, lateral view. Fig. 8, paraphysis, ventral view. Fig. 9, aedeagus, lateral view. Fig. 10, aedeagus, ventral view. All drawn to same scale.

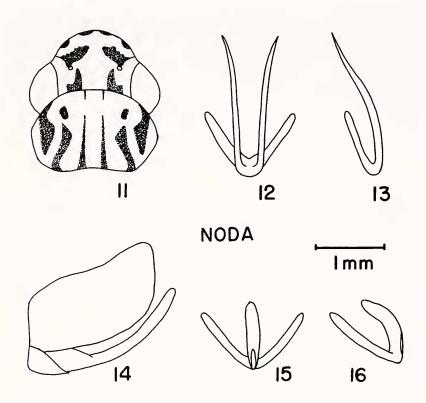
**Notes:** This species is quite similar to *pinguis*, but it differs by being darker in color, with the conspicuous yellow spots and the aedeagus having the lateral spines extending ventrally. Other specimens seen are one male and two females from the same area, collected July 20 or 31, at 730 m., by the same collectors, in the Carnegie Museum.

#### Apogonalia noda NEW SPECIES (Figures 11-16)

**Description:** Length of males 7-7.5 mm., females 7-7.6 mm. A long, narrow, greenish species with reddish front wings. General coloration greenish yellow with dark brown pattern, and reddish under the front wings. Head and pronotum (Fig. 11) patterned with four evenly spaced dark spots across margin, two spots near ocelli, two near hind margin of head, and three irregular lines on each side of pronotum. Front wings with most longitudinal veins dark brown, patch of pink at base of wing, with underneath red. Dorsal surface of abdomen red, ventral surface reddish or dark brown. Male genitalia: Plates (Fig. 14) as long as pygofer. Pygofer long and truncate. Paraphysis (figs. 12 and 13) with two long thin parallel processes which diverge near apex. Aedeagus (Figs. 15 and 16) short with shaft simple, tubular, curving dorsad, gonopore near base.

**Type Data:** Holotype male, Dominican Republic: Hato Mayor, Parque Los Haitises, near Cueva de Arena, 19° 04' N 69° 28' W, 10 m., July 7-9, 1992, C. Young, R. Davidson, S. Thompson and J. Rawlins, costal vegetation on limestone. Paratypes: one male and two females, same data as holotype. Holotype and one female paratype in the Carnegie Museum, one male paratype in the University of Kentucky Collection and one female paratype in the Florida Collection of Arthropods.

**Notes:** This species can be distinguished from all other species of *Apogonalia* known from Hispaniola by its evenly spaced spots on the margin of the head, or the unusual male aedeagus. Other specimens seen are one male and two females from Pedernales, from 540 to 730 m., 23-26 km. N Cabo Rojo, July 20, 1990, and two males from Barahona, near Rio Nizao, July or August 1990, all collected by the same collectors, in the Carnegie Museum.



Figures 11-16 *Apogonalia noda* n. sp. Fig. 11, head, pronotum, and scutellum, dorsal view. Fig. 12, paraphysis, ventral view. Fig. 13, paraphysis, lateral view. Fig. 14, male genital capsule, lateral view. Fig. 15, aedeagus, ventral view. Fig. 16, aedeagus, lateral view. All drawn to same scale.

#### LITERATURE CITED

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